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Notice of Allowability

Application No.

09/899,508

Examiner

Puneet Bhandari

Applicant(s)

KODIALAM ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/13/2005.
2. ☒ The allowed claim(s) is/are 1-40.
3. ☒ The drawings filed on 05 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 06/23/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steve Mendelsohn (Reg. 35951) on June 23, 2005.

The application has been amended as follows:

In claim 14, on page 6, on line 3 replace " B_{ij} " with " B_{uv} " and also replace " $l(i,j)$ " with " $l(u,v)$ ". On line 6 replace " G_{ij} " with " G_{uv} ". On line 7 replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 8 replace " $l(i,j)$ " with " $l(u,v)$ " and " G_{ij} " with " G_{uv} ".

In claim 15, on page 6, on line 15 replace " B_{ij} " with " B_{uv} " and also replace " $l(i,j)$ " with " $l(u,v)$ ". On page 7, line 2 replace " G_{ij} " with " G_{uv} ". On line 3, replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 4 replace " $l(i,j)$ " with " $l(u,v)$ ".

In claim 16, on page 7, on line 11 replace " B_{ij} " with " B_{uv} " and also replace " $l(i,j)$ " with " $l(u,v)$ ". On line 14, replace " G_{ij} " with " G_{uv} ". On line 15, replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 16 replace " $l(i,j)$ " with " $l(u,v)$ ".

In claim 17, on page 8, on line 5 replace " B_{ij} " with " B_{uv} " and also replace " $l(i,j)$ " with " $l(u,v)$ ". On line 8 insert " F_{jk} represents total amount of bandwidth reserved for the demands in set A_{jk} that use link $l(k,j)$ on the active path. On line 9, replace " G_{ij} " with " G_{uv} ". On line 10 replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 11 replace " $l(i,j)$ " with " $l(u,v)$ ". In claim 33, on page 10, on line 21, replace " B_{ij} " with " B_{uv} " and

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also replace " $l(i,j)$ " with " $l(u,v)$ ". On page 11, on line 3, replace " G_{ij} " with " G_{uv} ". On line 4 replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 5 replace " $l(i,j)$ " with " $l(u,v)$ ".

In claim **34**, on page 11, on line 12 replace " B_{ij} " with " B_{uv} " and also replace " $l(i,j)$ " with " $l(u,v)$ ". On line 15 replace " G_{ij} " with " G_{uv} ". On line 14 replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 17 replace " $l(i,j)$ " with " $l(u,v)$ ".

In claim **35**, on page 12, on line 2 replace " B_{ij} " with " B_{uv} " and also replace " $l(i,j)$ " with " $l(u,v)$ ". On line 6 replace " G_{ij} " with " G_{uv} ". On line 7 replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 8 replace " $l(i,j)$ " with " $l(u,v)$ ".

In claim **36**, on page 13, on line 12 replace " B_{ij} " with " B_{uv} ". On line 13 replace " $l(i,j)$ " with " $l(u,v)$ ". On line 14 insert " F_{jk} represents total amount of bandwidth reserved for the demands in set A_{jk} that use link $l(k,j)$ on the active path. On line 15 replace " G_{ij} " with " G_{uv} ". On line 16 replace " B_{ij} " with " B_{uv} ", " $l(i,j)$ " with " $l(u,v)$ " and " R_{ij} " with " R_{uv} ". On line 17 replace " $l(i,j)$ " with " $l(u,v)$ ".

Allowable Subject Matter

1. Claims **1-40** are allowed.
2. The following is an examiner's statement of reasons for allowance:

Regarding claims **1, 20 & 40** prior art of record fails to teach a step of reversing links in the graph to generate paths from the destination nodes along reverse paths to the source node. Prior art of record also fails to teach performing shortest-path computations for the portions of the reverse paths to generate weights for potential active-path links, wherein each weight of a link in a reverse path is based on number of

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reverse paths in which the link is included. Prior art of record also fails to teach repeating the above shortest-path computations for the graph from the destination to the source using the weighted links to generate an active path satisfying a path request, and each link in active path has a defined back-up path.

Regarding claims **2-19**, these claims are further limiting claim 1 and are thus allowable over prior art of record.

Regarding claims **21-39**, these claims are further limiting claim 20 and are thus allowable over prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

3. Applicant's arguments, filed 04/13/2005, with respect to claims 1, 20 and 40 have been fully considered and are persuasive. The rejections for these claims have been withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Puneet Bhandari whose telephone number is 571-272-2057. The examiner can normally be reached on 9.00 AM To 5.30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PB

Puneet Bhandari
Examiner
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